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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	F	ATTORNEY DOCKET NO.
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08/621,631 03/26/96 BROWN

PM52/0605

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MILL EXAMINER

ART UNIT 1

PAPER NUMBER

06/05/98/3

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/621,631

Applicant(s)

Brown et al

Examiner

M711

Group Art Unit

3641

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 11-26-97 & 3-17-98.
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-20 is/are pending in the application.
- Of the above claim(s) 2-9 & 11-12 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1 & 10 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☒ Claim(s) 1-20 are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____.

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 7
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

1. Applicants' elected single ultimate species on page 4-5 of the instant response is noted. The elected "single ultimate species" is in the manner of a claim, despite the examiners previous comments. In Paper No. 6, paragraph 4, near the end of the first paragraph, is found the clear direction that "the single ultimate species shall be one specific example as in a single example." In response thereto, applicants urged that scandium was the elected species. Paper No. 11, in pointing out that this was not responsive, noted in paragraph 2 that scandium was not a method, and that a "method might be leaching a specific named mineral ore (ore residue) with sulfuric acid under conditions" In their response, applicants did not recite any specific source material. Therefore, as previously set forth, this is the single ultimate species, and in accordance with MPEP 819, applicants will not be permitted to shift their election, e.g., change "a source material" to a specific ore residue from treating the original ore by some process, e.g. In a similar manner, in the first leaching step, a portion of any fluorine values may be liberated, while there is no mention thereof in the elected second leaching step. The elected species is further as set forth in applicants' response.

Applicants urge that claims 10-20 read on the elected species. Claims 11-20, do not appear generic or specific to the elected species. In claims 11, 14 and 16, HF is liberated in the second leach step, not the elected first leach step. In claim 15, the second leach step is a water leach, contrary to the elected sulfuric acid leach. (Claims 2-9 are not urged as reading on the elected species.) Claims 1 and 10 appear generic to the elected species, and no claim is specific thereto. Applicants are reminded that a species is only a species, and not a sub-genus. Claims 2-9 and 11-20 stand withdrawn from consideration as being to nonelected species.

2. The following is a quotation of 35 U.S.C. 103 which forms the basis for all rejections for obviousness set forth in this action:

"A patent may not be obtained though the invention is not identically

disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person."

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102, which form a basis for rejections herein:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1 and 10 are rejected under 35 U.S.C. 102 (b or e) as anticipated by or, in the alternative, under 35 U.S.C. 103 as obvious over each of the Harbuck et al. article and Carlson '970.

In Carlson '970, note "Example E", col. 15-16, where scandium is recovered by extraction with DEHPA and then stripped with 2M NaOH, the scandium extraction being quantitative. This is from the earlier process of "Example B", col. 10, which may be from a sulfuric/boric acid leach, line 42, or via sulfuric acid alone, line 52. In Harbuck et al., pages 109-110, strong sulfuric acid worked well, as did extraction with DEHPA at pages 114-115, e.g., and stripping with NaOH on page 116, e.g. This is as the claims are understood. To the extent necessary, variation of parameters would have been obvious to one of ordinary skill in the art. It is well settled that optimizing a result effective variable is well within the expected ability of a person of ordinary skill in

the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

4. Claims 1 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear what the starting material is. In claim 1, line 5, "the fluorine reduced material" has no antecedent basis, and it is not clear that fluorine reduces (the valence of?) the material, e.g. In the last line of claim 1, it is not clear what selectively extracting a metal value requires. Likewise in the last line of claim 10, it is not clear what a scandium metal value means. One would ordinarily recite scandium values, generic to dissolved scandium without regard to anion(s). These are exemplary.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

7. Any inquiry concerning either this or an earlier communication from the Examiner should be directed to Examiner Edward A. Miller at (703) 306-4163.

Examiner Miller may normally be reached daily, except alternate Fridays, from 8:30 AM to 6 PM.

If attempts to reach Examiner Miller by telephone are unsuccessful, his supervisor, Mr. Jordan, can be reached at (703) 306-4159. The Group fax number is (703) 306-4195.

If there is no answer, or for any inquiry of a general nature or relating to the application status, please call the Group receptionist at (703) 306-4177.

Miller/em
June 3, 1998

EDWARD A. MILLER
PRIMARY EXAMINER
ART UNIT ~~224~~ 3641